# **A-HP**SERIES

INTERCHANGE > Stucchi profile





### **TECHNICAL FEATURES AND OPTIONS**



Interchange Stucchi



Sealing description Nitrile NBR



Connection system Push



Available from 1/8"



/treatment Carbon steel /Cr3



Available threads BSP - NPT



pressure Up to 700 bar



Locking mechanism Locking Ball Safety sleeve



Flow rate Up to 46 I/min

Connection



Temperature -20°C / +100°C



Valving style Flat face



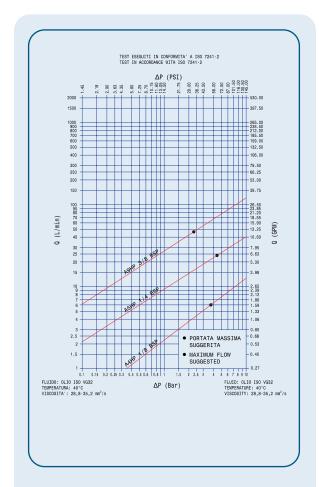
under pressure Connection: not allowed Disconnection: not allowed

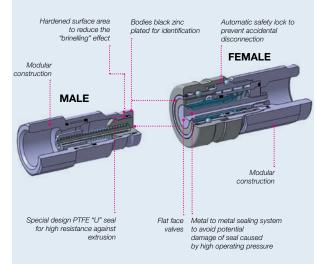
### BENEFITS

- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Internal design reduces pressure drop, increasing circuit efficiency.
- Automatic safety lock to prevent accidental disconnection. This safety feature is very important mainly for the rescue equipment.
- The modular structure allows broad range of port configurations.
- Compact slim design.
- Safe and simple to use

### HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect push the male half towards the female half or vice versa until the coupler sleeve clicks.
- Upon connection the safety sleeve automatically rotates engaging the safety lock mechanism. In this safety lock position the coupling cannot be disconnected until the operator aligns the sleeve in the proper position (safety locking ball aligned with the notch in the coupler sleeve).
- To disconnect turn the external sleeve until the until the stop and push back the sleeve.





# MAIN APPLICATIONS







#### PERFORMANCES

| Size | Series/Size | Max. flow | suggested | Conne | ct force | Disconn | Spillage* |      |  |
|------|-------------|-----------|-----------|-------|----------|---------|-----------|------|--|
| in   |             | l/min     | gpm       | N     | lbf      | N       | lbf       | ml   |  |
| 1/8  | A4HP        | 6         | 1,59      | 95    | 21,38    | 40      | 9,00      | 0,04 |  |
| 1/4  | A5HP        | 24        | 6,36      | 125   | 28,13    | 45      | 10,13     | 0,02 |  |
| 3/8  | A9HP        | 46        | 12,19     | 205   | 46,13    | 50      | 11,25     | 0,02 |  |

| Size | Series/Size |         | M     | ax. opera | ting pressu | ire    |       | Burst pressure |       |     |       |        |       |  |  |  |  |
|------|-------------|---------|-------|-----------|-------------|--------|-------|----------------|-------|-----|-------|--------|-------|--|--|--|--|
|      |             | Coupled |       | Male      |             | Female |       | Cou            | ıpled | M   | lale  | Female |       |  |  |  |  |
| in   |             | MPa     | psi   | MPa       | psi         | MPa    | psi   | MPa            | psi   | MPa | psi   | MPa    | psi   |  |  |  |  |
| 1/8  | A4HP        | 70      | 10150 | 70        | 10150       | 70     | 10150 | 160            | 23200 | 160 | 23200 | 160    | 23200 |  |  |  |  |
| 1/4  | A5HP        | 70      | 10150 | 70        | 10150       | 50     | 7250  | 200            | 29000 | 200 | 29000 | 150    | 21750 |  |  |  |  |
| 3/8  | A9HP        | 70      | 10150 | 70        | 10150       | 42     | 6090  | 180            | 26100 | 200 | 29000 | 125    | 18125 |  |  |  |  |

<sup>\*</sup> Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

#### Different possible configurations:

Different threads available upon request.

#### Temperature range:

Standard seals NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F). Please read carefully Instructions and warnings for proper selection of the products.

The couplings have been tested at impulse with max. operating pressure for pressure for 100.000 impulses according to ISO norm test method. A4HP has been tested for 10.000 impulses.



A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the female coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

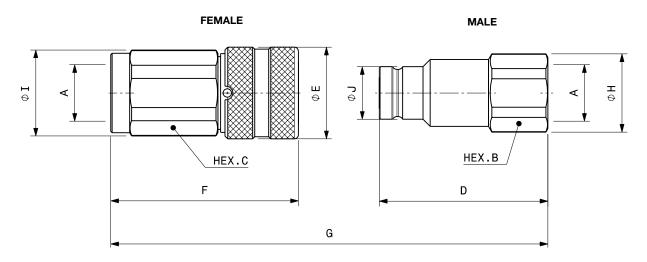
It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release. For specific, product-related, instructions, please contact Stucchi technical service.

# **A-HP**SERIES



## **OVERALL DIMENSIONS**



## Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

| BODY | Descriptive Code | Item Code |           | PORT (A) | Overall Length |         | Length |      | Hex  |      |      | Diameter |      |      | Diameter |      |      | Wei  | ght  |      |      |
|------|------------------|-----------|-----------|----------|----------------|---------|--------|------|------|------|------|----------|------|------|----------|------|------|------|------|------|------|
| SIZE |                  |           |           |          |                | mm      | in     |      | mm   | in   |      | mm       | in   |      | mm       | in   |      | mm   | in   | kg   | lb   |
| 1/8" | F A4HP 1/8 NPT   | Female    | 801601014 | 1/8"     | C              | 72,3    | 2,85   | F    | 44,0 | 1,73 | С    | 17,0     | 0,67 | ı    | 21,8     | 0,86 | Ε    | 22,0 | 0,87 | 0,09 | 0,20 |
| 1/0  | M A4HP 1/8 NPT   | Male      | 801601015 | 1/0      | u              | 12,3    | ۷,00   | D    | 36,2 | 1,43 | В    | 17,0     | 0,67 | Н    | 18,5     | 0,73 | J    | 12,0 | 0,47 | 0,04 | 0,09 |
| 1/4" | F A5HP 1/4 NPT   | Female    | 801601004 | 1/4"     | G              | 94,9    | 3,74   | F    | 58,0 | 2,28 | С    | 22,0     | 0,87 | -    | 29,0     | 1,14 | Ε    | 29,0 | 1,14 | 0,21 | 0,45 |
| 1/4  | M A5HP 1/4 NPT   | Male      | 801601005 |          | u              |         |        | D    | 47,9 | 1,89 | В    | 22,0     | 0,87 | Н    | 23,8     | 0,94 | J    | 16,5 | 0,65 | 0,09 | 0,20 |
| 1/4" | F A5HP 3/8 NPT   | Female    | 801601008 | 3/8"     | c              | G 103,9 | 4,09   | F    | 60,0 | 2,36 | С    | 24,0     | 0,94 | Ι    | 29,0     | 1,14 | Ε    | 29,0 | 1,14 | 0,21 | 0,46 |
| 1/4  | M A5HP 3/8 NPT   | Male      | 801601009 | 3/0      | u              |         |        | D    | 54,9 | 2,16 | В    | 24,0     | 0,94 | Н    | 26,0     | 1,02 | J    | 16,5 | 0,65 | 0,11 | 0,24 |
| 3/8" | F A9HP 3/8 NPT   | Female    | 801601010 | 3/8"     | G              | 108.8   | 4.28   | F    | 64,6 | 2,54 | С    | 30,0     | 1,18 | -    | 32,0     | 1,26 | Ε    | 34,0 | 1,34 | 0,32 | 0,71 |
| 3/0  | M A9HP 3/8 NPT   | Male      | 801601011 | 3/0 u    | 100,0          | 7,20    | D      | 60,0 | 2,36 | В    | 27,0 | 1,06     | Н    | 29,0 | 1,14     | J    | 19,5 | 0,77 | 0,15 | 0,34 |      |
| 3/8" | F A9HP 1/2 NPT   | Female    | 801601012 | 1/2"     | G              | 116,3   | 150    | F    | 69,6 | 2,74 | С    | 30,0     | 1,18 | Ι    | 32,0     | 1,26 | Ε    | 34,0 | 1,34 | 0,31 | 0,68 |
| 5/0  | M A9HP 1/2 NPT   | Male      | 801601013 | 1/2      |                | 110,0   | 4,00   | D    | 62,5 | 2,46 | В    | 27,0     | 1,06 | Н    | 29,0     | 1,14 | J    | 19,5 | 0,77 | 0,14 | 0,32 |